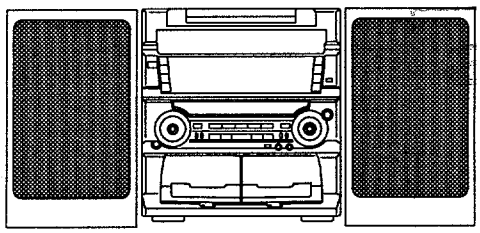
aiwa

aiwa SERVICE

Z-L52

SERVICE MANUAL



COMPACT DISC STEREO
CASSETTE RECEIVER

- BASIC TAPE MECHANISM: 2ZM–3MK2 PR5NM
- BASIC CD MECHANISM: 6ZG–1 SDFNSHM
- TYPE: EZ

SUPPLEMENT

SYSTEM	CD CASSEIVER	SPEAKER	REMOTE CONTROLLER
Z–L52	CX–ZL52	SX-ZL50	RC-ZAS02

- This Service Manual contains information about the difference between Z-L52 (EZ) and Z-L50 (EZ). If requiring the other information, see Service Manual of Z-L50 (EZ), (S/M Code No. 09-995-410-6R1)
- This Service Manual is the "Supplement" and replaces "Simple Manual", (S/M Code No. 09-995-410-6T2).
- If requiring information about the CD mechanism, see Service Manual of 6ZG-1, (S/M Code No. 09-994-326-2N2).

S/M Code No. 09–998–410–6S1

SPECIFICATIONS

<FM Tuner section>

Tuning range	87.5 MHz to 108 MHz
Usable sensitivity(IHF)	16.8 dBf
Antenna terminals	5 ohms (unbalanced)

<MW Tuner section>

Tuning range	530 kHz to 1710 kHz (10 kHz step) 531 kHz to 1602 kHz (9 kHz step)
Usable sensitivity	350 μV/m
Antenna	Loop antenna

<LW Tuner section>

Tuning range	144 kHz to 290 kHz
Usable sensitivity	1400 μV/m
Antenna	Loop antenna

<Amplifier section>

Power output	Rated: 12 W + 12 W (6 ohms, T.H.D 1 %, 1 kHz) Reference: 15 W + 15 W (6 ohms , T.H.D 10 %, 1kHz) DIN MUSIC POWER : 32 W + 32 W
Total harmonic distortion	0.05 % (6 W, 1 kHz, 6 ohms, DIN AUDIO)
Inputs	VIDEO/AUX IN: 500 mV
Outputs	CD DIGITAL OUT (OPTICAL) SPEAKERS: accept speakers of 6 ohms or more PHONES (stereo jack) : accept headphones of 32 ohms or more

<Cassette deck section>

Track format	4 tracks, 2 channels stereo
Frequency response	50 Hz – 10000 Hz
Recording system	AC bias
Heads	Deck 1 : playback head x 1 Deck 2 : Recording/Playback/ erase head x 1

<Compact disc player section>

Laser	Semiconductor laser (λ = 780 nm)
D-A converter	1 bit dual
Signal-to-noise ratio	85 dB (1 kHz, 0 dB)
Harmonic distortion	0.05 % (1 kHz, 0 dB)
Wow and flutter	Unmeasurable

<Speaker system SX-ZL50>

Cabinet type	2 way, bass reflex
Speakers	Woofer: 130 mm cone type Super tweeter: 20 mm ceramic type
Impedance	6 ohms
Output sound pressure level	87 dB/W/m
Dimensions (W x H x D)	260 x 444 x 215 mm
Weight	3.5 kg

<General>

Power requirements	230 V AC, 50 Hz
Power consumption	52 W
Dimensions of main unit (W x H x D)	360 x 394.5 x 387.5 mm
Weight of main unit	6.5 kg

• Design and specifications are subject to change without notice.

ACCESSORIES / PACKAGE LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-MAD-916-010	IB,EZ(9L)M-52	

ELECTRICAL MAIN PARTS LIST

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	8Z-MAD-610-010		IC,UPD780228-033-3BA
	87-A20-914-010		IC,SPS-442-1-F
	87-017-889-010		IC,NJM4558LD
	87-A20-715-010		IC,M62439SP
	87-017-888-080		IC,NJM4558MD
	87-070-127-110		IC,LC72131 D
	87-A20-913-010		IC,LA1837NL
	87-020-454-010		IC,DN6851
	87-A20-502-010		IC,BU1920
TRANSISTOR			
	87-026-610-080		TR,KTC3198GR
	87-A30-196-080		TR,2SC4115SRS
	87-026-609-080		TR,KTA1266GR
	89-213-702-010		TR,2SB1370 (1.8W)
	87-026-269-080		TR,DTA114ES
	87-026-219-080		TR,DTA144ES (0.3W)
	87-A30-087-080		C-FET,2SK2158
	87-A30-073-080		C-TR,RT1N 141C
	87-A30-256-010		TR,2SD1933
	87-A30-255-010		TR,2SB1342
	87-026-235-080		CHIP-TR,DTC114EK
	87-A30-091-080		FET,2SJ460
	87-A30-240-080		TR,CSA1585BC
	87-A30-090-080		FET,2SK2541
	87-A30-241-080		TR,KTA1272Y
	87-026-218-080		TR,DTC144ES (0.2W)
	87-026-214-080		TR,DTA114YS (0.3W)
	89-305-352-380		TR,2SC535(B/C)
	87-A30-164-080		TR,CSC2001K
	87-A30-092-080		FET,2SK439E/F
DIODE			
	87-020-465-080		DIODE,1SS133 (110MA)
	87-A40-336-080		ZENER,MTZJ27D T-72
	87-A40-345-080		ZENER,MTZJ10C
	87-070-274-080		DIODE,1N4003 SEM
	87-A40-535-080		DIODE,1N5393-GOODARK
	87-017-932-080		ZENER,MTJ6.2B
	87-A40-466-080		ZENER,MTZJ2.7A
	87-017-931-080		ZENER,MTZJ5.6B
MAIN C.B			
C101	87-016-495-090		CAP,E 3300-25 SMG
C104	87-A10-011-090		CAP,E 2200-25 SMG
C105	87-018-127-080		CAP, CER 470P-50V
C106	87-010-408-080		CAP, ELECT 47-50V
C107	87-010-384-080		CAP, ELECT 100-25V
C108	87-010-381-080		CAP, ELECT 330-16V
C111	87-010-247-080		CAP, ELECT 100-50V
C112	87-010-263-080		CAP, ELECT 100-10V
C113	87-010-403-080		CAP, ELECT 3.3-50V
C114	87-010-374-080		CAP, ELECT 47-10V
C115	87-A10-303-080		CAP,M 0.047-50 J
C116	87-A10-303-080		CAP,M 0.047-50 J
C122	87-010-384-080		CAP, ELECT 100-25V
C123	87-010-384-080		CAP, ELECT 100-25V
C130	87-018-119-080		CAP,TC U 100P-50 K B
C207	87-010-546-080		CAP, ELECT 0.33-50V
C208	87-010-546-080		CAP, ELECT 0.33-50V
C209	87-018-133-080		CAPACITOR,CER 4700P-16V
C210	87-018-133-080		CAPACITOR,CER 4700P-16V
C211	87-010-403-080		CAP, ELECT 3.3-50V
C212	87-010-403-080		CAP, ELECT 3.3-50V
C213	87-A10-899-080		CAP,E 47-25 M BP SME
C214	87-A10-899-080		CAP,E 47-25 M BP SME
C219	87-010-544-080		CAP, ELECT 0.1-50V
C220	87-010-544-080		CAP, ELECT 0.1-50V
C221	87-018-211-080		CAP, CER 0.01-50
C222	87-018-211-080		CAP, CER 0.01-50
C223	87-018-134-080		CAPACITOR,TC-U 0.01-16
C224	87-018-134-080		CAPACITOR,TC-U 0.01-16
C229	87-018-123-080		CAP, CER 220P-50V
C230	87-018-123-080		CAP, CER 220P-50V
C237	87-018-134-080		CAPACITOR,TC-U 0.01-16
C253	87-018-131-080		CAP, CER 1000P-50V
C254	87-018-131-080		CAP, CER 1000P-50V
C255	87-018-115-080		CAP, CER 47P-50V
C256	87-018-115-080		CAP, CER 47P-50V
C257	87-018-119-080		CAP, CER 100P-50V
C258	87-018-119-080		CAP, CER 100P-50V
C301	87-018-195-080		CAP, CER 1200P-16V
C302	87-018-195-080		CAP, CER 1200P-16V
C303	87-018-130-080		CAP,TC-U 820P-50 B
C304	87-018-130-080		CAP,TC-U 820P-50 B
C307	87-010-263-080		CAP, ELECT 100-10V
C308	87-010-263-080		CAP, ELECT 100-10V
C309	87-018-115-080		CAP, CER 47P-50V
C310	87-018-115-080		CAP, CER 47P-50V
C317	87-010-546-080		CAP, ELECT 0.33-50V
C318	87-010-546-080		CAP, ELECT 0.33-50V
C322	87-018-209-080		CAP, CER 0.1-50V
C325	87-018-209-080		CAP, CER 0.1-50V
C326	87-018-209-080		CAP, CER 0.1-50V
C327	87-018-209-080		CAP, CER 0.1-50V
C350	87-018-209-080		CAP, CER 0.1-50V
C360	87-010-401-080		CAP, ELECT 1-50V
C361	87-010-374-080		CAP, ELECT 47-10V
C399	87-018-127-080		CAP, CER 470P-50V
C401	87-010-400-080		CAP, ELECT 0.47-50V
C402	87-010-400-080		CAP, ELECT 0.47-50V
C403	87-018-118-080		CAP,TC-U 82P-50 B
C404	87-018-118-080		CAP,TC-U 82P-50 B
C411	87-010-405-080		CAP, ELECT 10-50V
C412	87-010-405-080		CAP, ELECT 10-50V
C452	87-010-382-080		CAP, ELECT 22-25V
C457	87-A10-292-080		CAP,M 5600P-50 J
C458	87-018-131-080		CAP, CER 1000P-50V
C459	87-018-128-080		CAP, CERA-SOL SS 560P
C461	87-018-126-080		CAP,TC-U 390P-50 B
C462	87-018-126-080		CAP,TC-U 390P-50 B
C601	87-018-195-080		CAP, CER 1200P-16V
C602	87-018-195-080		CAP, CER 1200P-16V
C611	87-010-545-080		CAP, ELECT 0.22-50V
C612	87-010-545-080		CAP, ELECT 0.22-50V
C613	87-010-545-080		CAP, ELECT 0.22-50V
C614	87-010-545-080		CAP, ELECT 0.22-50V
C615	87-018-104-080		CAP,TC-U 10P-50 SL
C616	87-010-260-080		CAP, ELECT 47-25V
C617	87-010-260-080		CAP, ELECT 47-25V
C701	87-010-404-080		CAP, ELECT 4.7-50V
C702	87-018-134-080		CAPACITOR,TC-U 0.01-16
C703	87-018-134-080		CAPACITOR,TC-U 0.01-16
C704	87-018-131-080		CAP, CER 1000P-50V
C705	87-018-131-080		CAP, CER 1000P-50V
C706	87-018-131-080		CAP, CER 1000P-50V
C707	87-010-112-080		CAP, ELECT 100-16V
C708	87-A11-144-080		CAP,TC U 0.1-50 K B
C709	87-010-248-080		CAP, ELECT 220-10V
C710	87-010-112-080		CAP, ELECT 100-16V
C712	87-018-149-080		CAP,TC-U 15P-50 CH
C713	87-018-149-080		CAP,TC-U 15P-50 CH
C714	87-010-112-080		CAP, ELECT 100-16V
C715	87-018-119-080		CAP, CER 100P-50V
C746	87-018-134-080		CAPACITOR,TC-U 0.01-16
C751	87-018-131-080		CAP, CER 1000P-50V

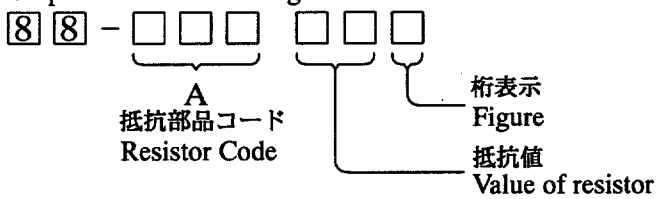
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C752	87-018-143-080		CAP,TC-U 4.7P-50 CH
C753	87-010-408-080		CAP, ELECT 47-50V
C755	87-018-209-080		CAP, CER 0.1-50V
C756	87-018-134-080		CAPACITOR,TC-U 0.01-16
C757	87-018-134-080		CAPACITOR,TC-U 0.01-16
C758	87-010-112-080		CAP, ELECT 100-16V
C759	87-018-134-080		CAPACITOR,TC-U 0.01-16
C761	87-010-404-080		CAP, ELECT 4.7-50V
C762	87-010-400-080		CAP, ELECT 0.47-50V
C763	87-010-401-080		CAP, ELECT 1-50V
C764	87-010-401-080		CAP, ELECT 1-50V
C765	87-018-115-080		CAP, CER 47P-50V
C766	87-010-407-080		CAP, ELECT 33-50V
C768	87-018-208-080		CAP 0.047-50F
C769	87-010-403-080		CAP, ELECT 3.3-50V
C770	87-018-134-080		CAPACITOR,TC-U 0.01-16
C771	87-010-406-080		CAP, ELECT 22-50
C773	87-018-196-080		CAP, CER 1500P-16V
C774	87-010-405-080		CAP, ELECT 10-50V
C776	87-018-134-080		CAPACITOR,TC-U 0.01-16
C783	87-018-202-080		CAP.CERAM.6800PF
C784	87-018-202-080		CAP.CERAM.6800PF
C785	87-010-405-080		CAP, ELECT 10-50V
C786	87-010-405-080		CAP, ELECT 10-50V
C787	87-018-196-080		CAP, CER 1500P-16V
C788	87-018-196-080		CAP, CER 1500P-16V
C789	87-010-403-080		CAP, ELECT 3.3-50V
C790	87-010-403-080		CAP, ELECT 3.3-50V
C801	87-018-134-080		CAPACITOR,TC-U 0.01-16
C802	87-018-134-080		CAPACITOR,TC-U 0.01-16
C803	87-018-134-080		CAPACITOR,TC-U 0.01-16
C804	87-018-134-080		CAPACITOR,TC-U 0.01-16
C805	87-018-134-080		CAPACITOR,TC-U 0.01-16
C807	87-018-134-080		CAPACITOR,TC-U 0.01-16
C808	87-018-134-080		CAPACITOR,TC-U 0.01-16
C809	87-018-134-080		CAPACITOR,TC-U 0.01-16
C810	87-018-134-080		CAPACITOR,TC-U 0.01-16
C811	87-018-134-080		CAPACITOR,TC-U 0.01-16
C812	87-010-408-080		CAP, ELECT 47-50V
C813	87-018-131-080		CAP, CER 1000P-50V
C814	87-010-260-080		CAP,E 47-25 M 11L SME
C851	87-018-123-080		CAP, CER 220P-50V
C852	87-018-123-080		CAP, CER 220P-50V
C853	87-018-127-080		CAP, CER 470P-50V
C854	87-018-209-080		CAP, CER 0.1-50V
C855	87-010-405-080		CAP, ELECT 10-50V
C856	87-010-405-080		CAP, ELECT 10-50V
C857	87-018-134-080		CAPACITOR,TC-U 0.01-16
C858	87-018-109-080		CAP, CER 22-50V
C859	87-018-109-080		CAP, CER 22-50V
C860	87-018-134-080		CAPACITOR,TC-U 0.01-16
C901	87-018-209-080		CAP, CER 0.1-50V
C921	87-018-134-080		CAPACITOR,TC-U 0.01-16
C922	87-018-099-080		CAP CERA 3.9P-50
C923	87-018-102-080		CAP,TC-U 6.8P-50 SL
C924	87-014-049-080		CAP,PP 470P-100 J
C937	87-018-134-080		CAPACITOR,TC-U 0.01-16
C938	87-018-134-080		CAPACITOR,TC-U 0.01-16
C943	87-018-209-080		CAP, CER 0.1-50V
CF801	87-008-423-010		CERAMIC FILTER, SFE10.7
CF802	82-785-747-010		CF MS2 GHY R
CN301	87-A60-620-010		CONN,3P V 2MM JMT
CN351	87-A60-625-010		CONN,8P V 2MM JMT
CN601	87-099-719-010		CONN,30P TYK-B(X)
CN602	87-099-194-010		CONN,6P 6216V
FB129	87-008-372-080		FILTER, EMI BL OIRNI
FB301	87-008-372-080		FILTER, EMI BL OIRNI
FB303	87-008-474-080		F-BEAD,EMI BL02RN1
FB307	87-008-372-080		FILTER, EMI BL OIRNI
FB313	87-008-372-080		FILTER, EMI BL OIRNI
FB317	87-008-474-080		F-BEAD,EMI BL02RN1
FB601	87-008-372-080		FILTER, EMI BL OIRNI
FB603	87-008-372-080		FILTER, EMI BL OIRNI
FC602	88-906-221-110		FF-CABLE,6P 1.25
FFE801	A8-6ZA-191-130		6ZA-1 FEENM
J202	87-A60-238-010		TERMINAL,SP 4P (MSC)
J204	87-A60-602-010		JACK,DIA6.3 BLK ST W/SW TC
J601	87-A60-881-010		JACK,PIN 2P MSP 242V05
J802	87-A60-427-010		TERMINAL,ANT PAL 2P YKD31-0429
L201	87-003-383-010		COIL,1UH-S
L202	87-003-383-010		COIL,1UH-S
L451	87-007-342-010		COIL,OSC 85K BIAS
L701	87-005-847-080		COIL,2.2UH(CECS)
L771	87-A50-266-010		COIL,FM DET-2N(TOK)
L772	87-A91-110-010		FLTR,PCFJZH-450 (TOK)
L801	87-005-847-080		COIL,2.2UH(CECS)
L851	87-005-847-080		COIL,2.2UH(CECS)
L941	87-A50-020-010		COIL,ANT LW(COI)
L942	87-A50-019-010		COIL,OSC LW(COI)
L981	8Z-NFA-665-010		COIL,AM PACK2L(TOK)
R249	87-A00-258-080		RES,M/F 0.22-1W J
R250	87-A00-258-080		RES,M/F 0.22-1W J
RY101	87-A90-464-010		RELAY, DG12D2-O(M)
SFR451	87-A90-432-080		SFR,30K H NVZ6TLTA
SFR452	87-A90-432-080		SFR,30K H NVZ6TLTA
TC942	87-011-221-080		CAP, TRIMMER 30P
W101	83-NE2-618-110		F-CABEL,5P-2.5
WH102	87-A90-459-010		HLDR,WIRE 2.5-5P
X701	87-A70-061-010		VIB,XTAL 4.500MHZ CSA-309
X851	87-A70-091-010		VIB,XTAL 4.332MHZ CSA-309
FRONT C.B			
C201	87-010-145-080		C-CAP,S 1P-50 CH
C202	87-010-196-080		CHIP CAPACITOR,0.1-25
C203	87-010-198-080		CAP, CHIP 0.022
C204	87-012-140-080		CAP 470P
C205	87-010-311-080		CAP 12P
C206	87-010-175-080		CAP 560P
C207	87-010-178-080		CHIP CAP 1000P
C208	87-010-196-080		CHIP CAPACITOR,0.1-25
C209	87-010-401-040		CAP,E 1-50 SME
C210	87-010-248-040		CAP,E 220-10 SME
C211	87-010-194-080		CAP, CHIP 0.047
C212	87-010-263-040		CAP,E 100-10
C213	87-010-281-040		CAP,E 22-35 5L
C214	87-010-405-040		CAP,E 10-50
C217	87-010-196-080		CHIP CAPACITOR,0.1-25
C401	87-010-197-080		CAP, CHIP 0.01 DM
C601	87-010-196-080		CHIP CAPACITOR,0.1-25
C602	87-010-196-080		CHIP CAPACITOR,0.1-25
C603	87-010-421-040		CAP,E 4.7-50 5L
C604	87-010-196-080		CHIP CAPACITOR,0.1-25
C605	87-010-560-040		CAP,E 10-50 GAS
C606	87-010-560-040		CAP,E 10-50 GAS
C801	87-010-405-040		CAP,E 10-50
C802	87-010-560-040		CAP,E 10-50 GAS
C803	87-010-560-040		CAP,E 10-50 GAS
C804	87-010-405-040		CAP,E 10-50
C805	87-010-196-080		CHIP CAPACITOR,0.1-25
C806	87-010-246-040		CAP,E 47-35 SME
C807	87-010-194-080		CAP, CHIP 0.047
C901	87-012-140-080		CAP 470P
C902	87-012-140-080		CAP 470P
C903	87-012-140-080		CAP 470P
C904	87-012-140-080		CAP 470P
C905	87-012-140-080		CAP 470P
C906	87-012-140-080		CAP 470P
C907	87-012-140-080		CAP 470P
C908	87-012-140-080		CAP 470P

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C909	87-012-140-080		CAP 470P
C910	87-012-140-080		CAP 470P
CN101	87-099-720-010		CONN,30P TYK-B(P)
CN102	87-A60-139-010		CONN,14P V FE
CN303	87-099-017-010		CONN,15P 6216 V
FC102	88-914-251-110		FF-CABLE,14P 1.25
FC303	88-915-111-110		FF-CABLE,15P 1.25
FL301	8Z-MAD-605-010		FL,SVA-10MS13
L201	87-A50-434-010		COIL,CLK 4.19M(TOKO)
S401	87-A90-095-080		SW,TACT EVQ11G04M
S402	87-A90-095-080		SW,TACT EVQ11G04M
S403	87-A90-095-080		SW,TACT EVQ11G04M
S404	87-A90-095-080		SW,TACT EVQ11G04M
S405	87-A90-095-080		SW,TACT EVQ11G04M
S406	87-A90-095-080		SW,TACT EVQ11G04M
S407	87-A90-095-080		SW,TACT EVQ11G04M
S408	87-A90-095-080		SW,TACT EVQ11G04M
S409	87-A90-095-080		SW,TACT EVQ11G04M
S410	87-A90-095-080		SW,TACT EVQ11G04M
S411	87-A90-095-080		SW,TACT EVQ11G04M
S412	87-A90-095-080		SW,TACT EVQ11G04M
S413	87-A90-095-080		SW,TACT EVQ11G04M
S414	87-A90-095-080		SW,TACT EVQ11G04M
S415	87-A90-095-080		SW,TACT EVQ11G04M
S416	87-A90-095-080		SW,TACT EVQ11G04M
S417	87-A90-095-080		SW,TACT EVQ11G04M
S418	87-A90-095-080		SW,TACT EVQ11G04M
S419	87-A90-095-080		SW,TACT EVQ11G04M
S420	87-A90-095-080		SW,TACT EVQ11G04M
S421	87-A90-095-080		SW,TACT EVQ11G04M
S422	87-A90-095-080		SW,TACT EVQ11G04M
S423	87-A90-095-080		SW,TACT EVQ11G04M
S424	87-A90-095-080		SW,TACT EVQ11G04M
S425	87-A90-095-080		SW,TACT EVQ11G04M
SW201	87-A90-535-010		SW,RTRY EC16B24304

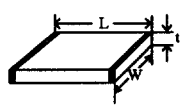
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
DECK C.B			
CON502	87-099-756-019		CONN,15P 9604S F
SFR1	87-024-581-010		SFR,3.3K DIA 6H
SOL1	82-ZM1-626-010		SOL ASSY,27K
SOL2	82-ZM1-626-010		SOL ASSY,27K
SW1	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW2	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW3	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW4	87-036-110-010		SW,MICRO SPPB62
SW5	87-036-110-010		SW,MICRO SPPB62
SW6	87-036-110-010		SW,MICRO SPPB62
SW8	87-A90-248-010		SW,MICRO ESE11SH2CXQ
SW9	87-A90-248-010		SW,MICRO ESE11SH2CXQ
W1	82-ZM3-601-010		RBN-CORD,4P-75
HEAD-1 C.B			
	85-ZM3-601-010		PWB,FLEX I
CON301	85-MA2-615-010		CONN ASSY, 3P PH
HEAD-2 C.B			
	85-ZM3-601-010		PWB,FLEX I
CON351	85-CF5-660-010		CONN ASSY, 8P RPB

Oチップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード : A Resistor Code : A
1/16W	1005	±5%	CJ		1.0	0.5	0.35	104
1/16W	1608	±5%	CJ		1.6	0.8	0.45	108
1/10W	2125	±5%	CJ		2	1.25	0.45	118
1/8W	3216	±5%	CJ		3.2	1.6	0.55	128

A MAIN C.B

TO CD MECHANISM (6ZG-1)
FC602
TO CN602

FROM G HEAD-1 C.B
CON301
TO CN301

FROM H HEAD-2 C.B
CON351
TO CN351

J802
ANTENNA

MW/LW LOOP

TFM
75Ω
(COAXIAL)

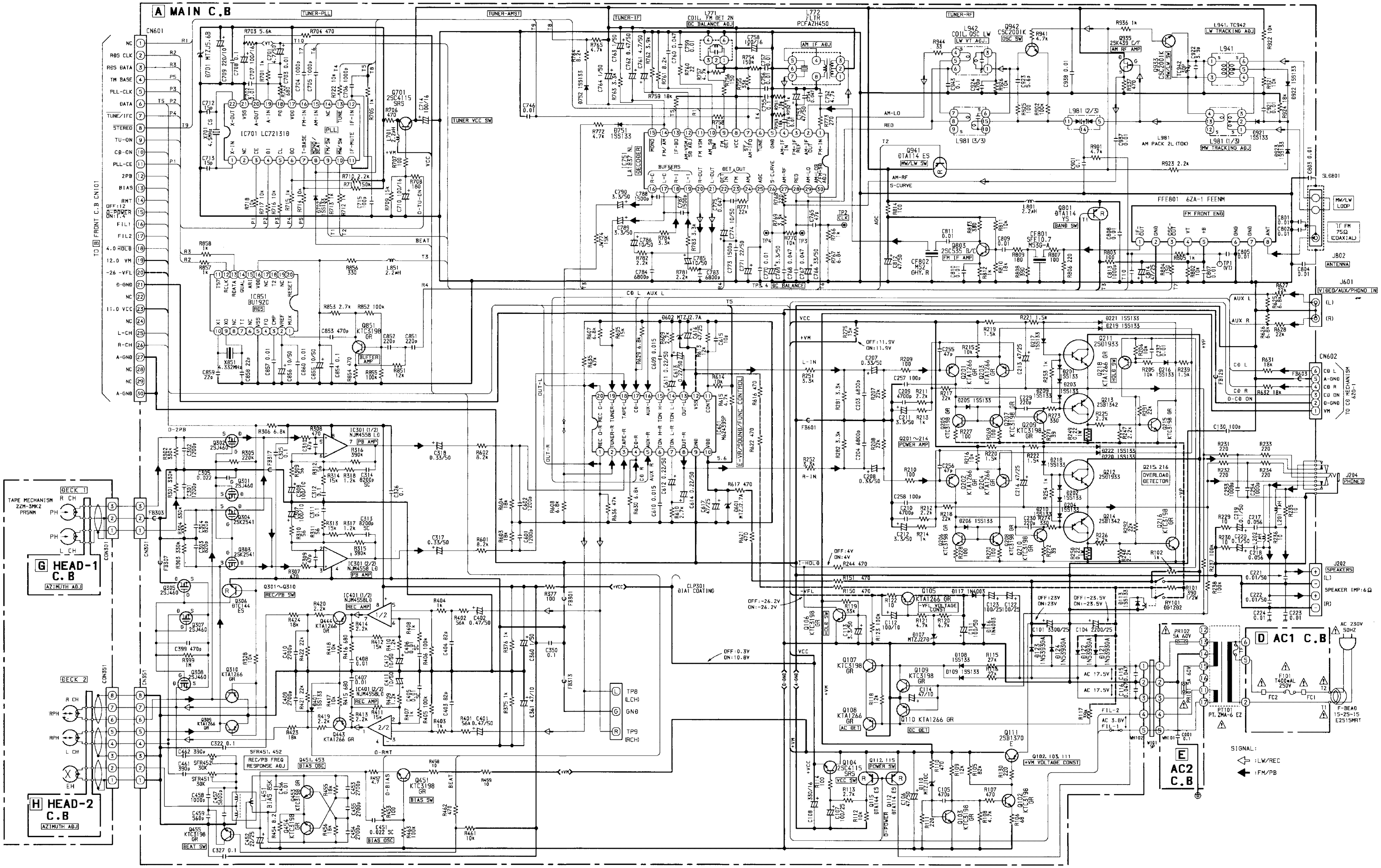
J601
VIDEO/AUX/
PHONO IN

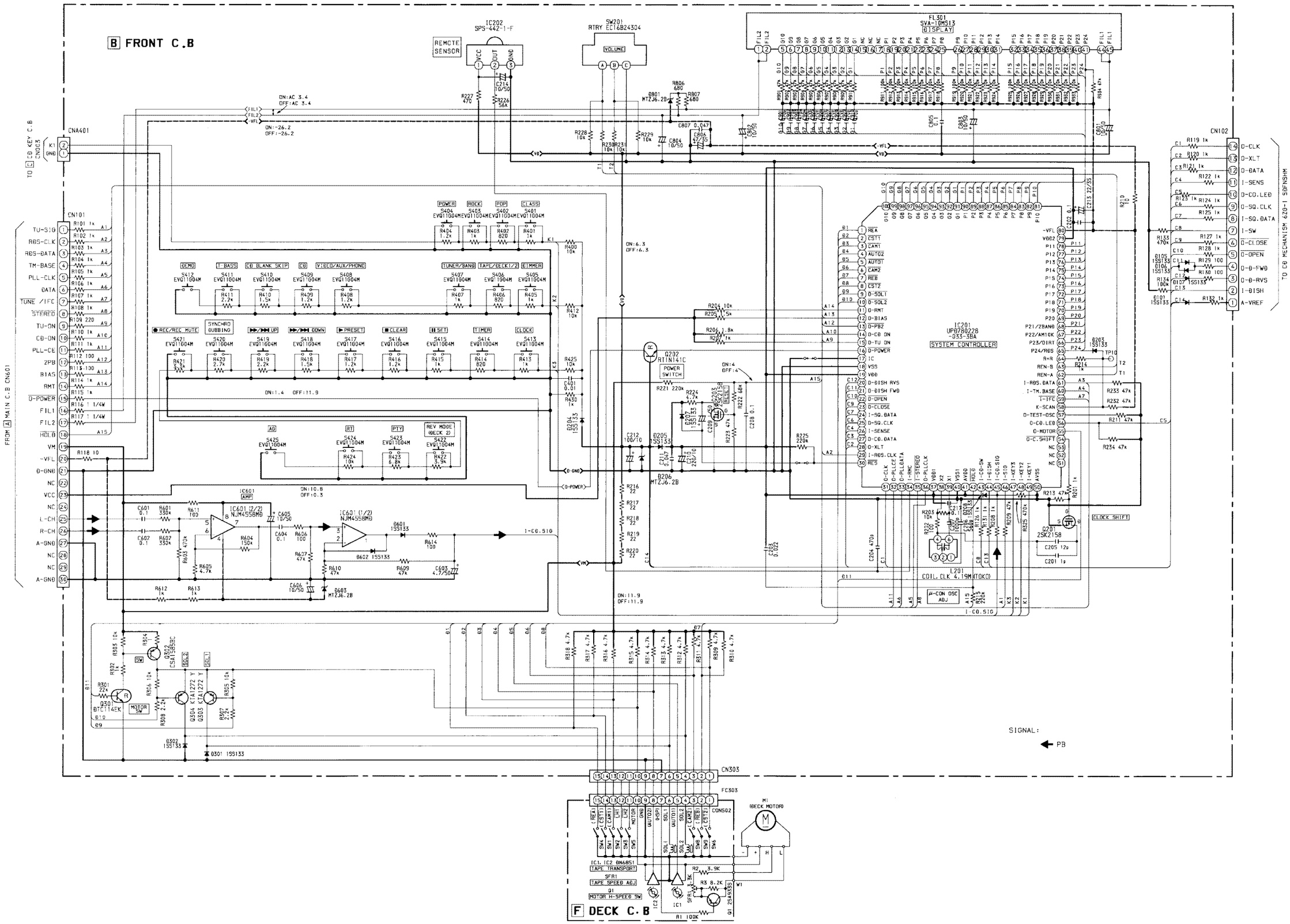
FROM E AC2 C.B
WH101
WHT

J202
SPEAKERS
SPEAKER IMP: 6Ω

TO B FRONT C.B
CN101

J204
PHONES


A MAIN C.B
TUNER-PLL
TUNER-AMST
TUNER-IF
TUNER-RF
TUNER VCC SW
IC701 LC72131B
IC751 LA1837 NL
DECODER
IC851 BU1920
RDS
BUFFER AMP
IC601 M62439SP
E-VR/SOUND/FUNC CONTROL
IC301 (1/2) NJM4558 LD
PB AMP
IC401 (1/2) NJM4558LD
REC AMP
Q301∼Q310
REC/PB SW
Q451, 453
BIAS OSC
BEAT SW
BIAS SW
Q201∼214
POWER AMP
Q215, 216
OVERLOAD DETECTOR
FFE801 6ZA-1 FEENM
FM FRONT END
FM IF AMP
BAND SW
MW/LW SW
AM RF AMP
OSC SW
L981 AM PACK 2L (TOK)
MW TRACKING ADJ
LW TRACKING ADJ
LW VT ADJ.
AM IF ADJ
DC BALANCE ADJ
CN601
TO B FRONT C.B CN101
CN602
TO CD MECHANISM 6ZG-1
J601 VIDEO/AUX/PHONO IN
J802 ANTENNA
J204 PHONES
J202 SPEAKERS
SPEAKER IMP:6Ω
TAPE MECHANISM ZZM-3MK2 PR5NM
DECK 1
DECK 2
G HEAD-1 C.B
AZIMUTH ADJ
H HEAD-2 C.B
AZIMUTH ADJ
REC/PB FREQ RESPONSE ADJ
CLP301 BIAS COATING
TP8 (LCH)
GND
TP9 (RCH)
-VFL VOLTAGE CONST
+VM VOLTAGE CONST
VCC SW
POWER SW
HOLD SW
AC DET
DC DET
D AC1 C.B
E AC2 C.B
PT101 PT, ZMA-6 EZ
AC 230V 50HZ
F101 T400mAL 250V
F-BEAD 15-25-15 E2515MRT
SIGNAL:
:LW/REC
:FM/PB


B FRONT C.B
IC202 SPS-442-1-F
REMOTE SENSOR
SW201 RTRY EC16B24304
VOLUME
FL301 SVA-10MS13 DISPLAY
CN401
CN003 CD KEY C.B
TO C.B
CN101
FROM A MAIN C.B CN601
CN102
TO CD MECHANISM 6Z9-1 SDFNSHM
IC201 UPD780228 -033-5BA SYSTEM CONTROLLER
POWER
ROCK
POP
CLASS
DEMO
T-BASS
CD BLANK SKIP
CD
VIDEO/AUX/PHOND
TUNER/BAND
TAPE/DECK1/2
DIMMER
REC/REC MUTE
SYNCHRO DUBBING
PRESET
CLEAR
SFT
TIMER
CLOCK
AG
RT
PTY
REV.MODE (MECK 2)
IC601 AMP
IC601 (2/2) NJM4558MD
IC601 (1/2) NJM4558MD
Q202 RT1N141C POWER SWITCH
Q302 2SA1359BC
Q301 DTC114EK MOTOR SW
Q303 KTA1272 Y
Q304 KTA1272 Y
CN303
FC303
CON502
M1 DECK MOTOR
IC1, IC2 BA6851 TAPE TRANSPORT
SFR1 TAPE SPEED ADJ
Q1 MOTOR H-SPEED SW
F DECK C.B
L201 COIL, CLK 4.19M (TOKO)
μ-CON OSC ADJ
CLOCK SHIFT
SIGNAL: PB

B FRONT C.B

TO C CD KEY C.B CN003

TO 6ZG-1 SDFNSHM

TO F DECK C.B CON502

FC102

FC303

FL301 DISPLAY

CNA401

CN102

CN303

FL301

IC201

IC202

IC601

S401 CLASSIC

S402 POP GRAPHIC EQUALIZER

S403 ROCK

S404 POWER

S405 DIMMER

S406 TAPE/DECK 1/2

S407 TUNER/BAND

S408 VIDEO/AUX/PHONO

S409 CD

S410 CD BLANK SKIP

S411 T-BASS

S412 DEMO

S413 CLOCK

S414 TIMER

S415 ❚❚ SET

S416 ■ CLEAR

S417 ▶ PRESET

S418 ◀◀/⏮ DOWN

S419 ▶▶/⏭ UP

S420 SYNCHRO DUBBING

S421 ● REC/REC MUTE

S422 REV MODE (DECK 2)

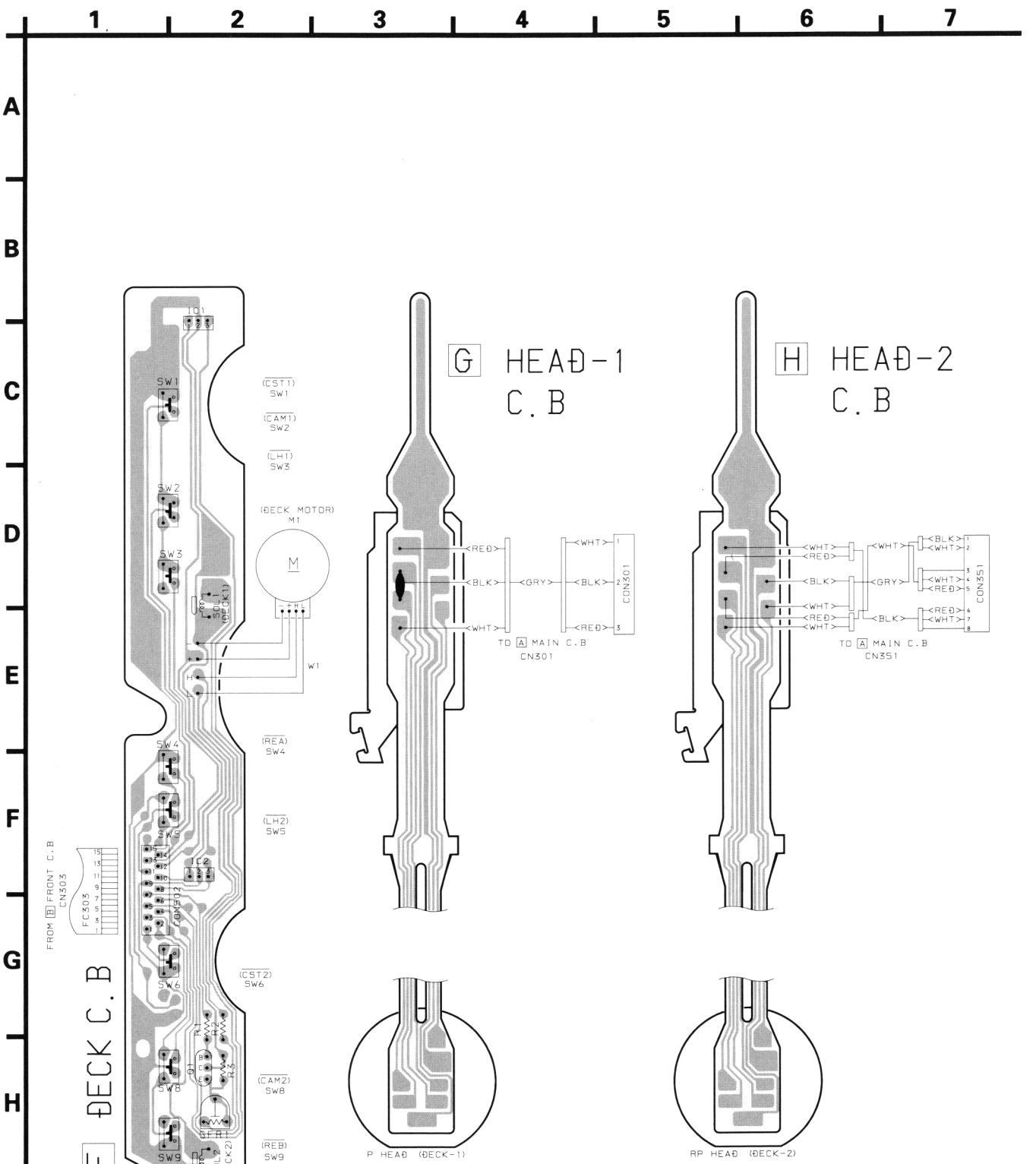
S423 PTY

S424 RT

S425 AG

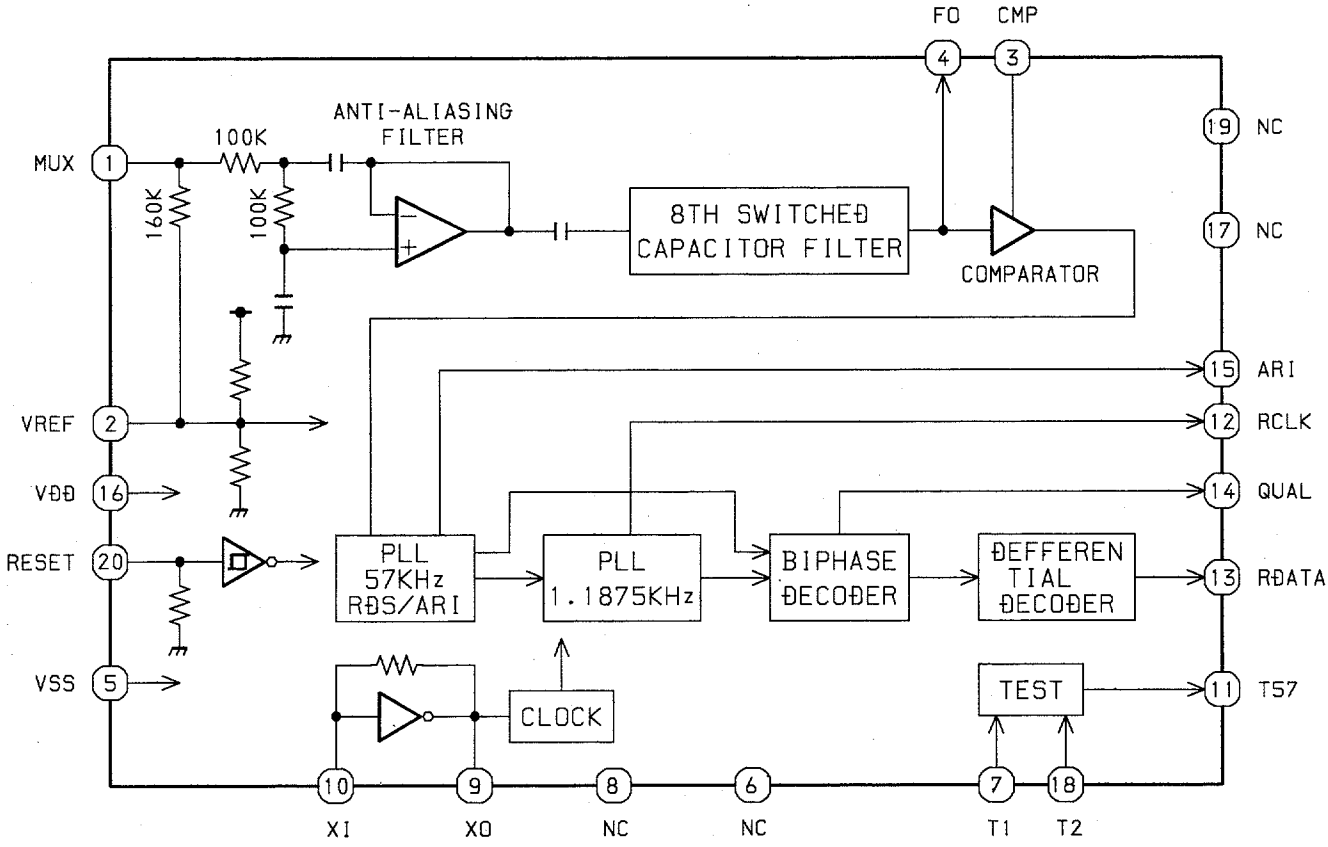
SW201 VOLUME

FROM A MAIN C.B CN601


1
2
3
4
5
6
7
A
B
C
D
E
F
G
H
I
J
F DECK C.B
G HEAD-1 C.B
H HEAD-2 C.B
TO1
SW1
SW2
SW3
SW4
SW5
SW6
SW8
SW9
(CST1) SW1
(CAM1) SW2
(LH1) SW3
(DECK MOTOR) M1
M
SOL1 (DECK1)
W1
(REA) SW4
(LH2) SW5
IC2
(CST2) SW6
(CAM2) SW8
(REB) SW9
SOL2 (DECK2)
Q1
R1
R2
SFR1
FROM B FRONT C.B CN303
FC303
CON302
RED
BLK
GRY
WHT
CN301
TO A MAIN C.B CN301
CN351
TO A MAIN C.B CN351
P HEAD (DECK-1)
RP HEAD (DECK-2)

IC BLOCK DIAGRAM

IC, BU1920



ADJUSTMENT <DECK>

12. Tape Speed Adjustment (DECK 1, DECK 2)
    Settings : • Test tape : TTA–100 (3kHz)
    • Test point : TP9(Rch), TP8(Lch)
    • Adjustment location : SFR1
    Method : Play back the test tape and adjust SFR1 so that the frequency counter reads 3000Hz ± 5Hz(FWD) and ± 45Hz(REV) with respect to forward speed.

PRACTICAL SERVICE FIGURE

<DECK SECTION>

Wow & flutter : Less than 0.15% (W.R.M.S)

MECHANICAL PARTS LIST 1 / 1

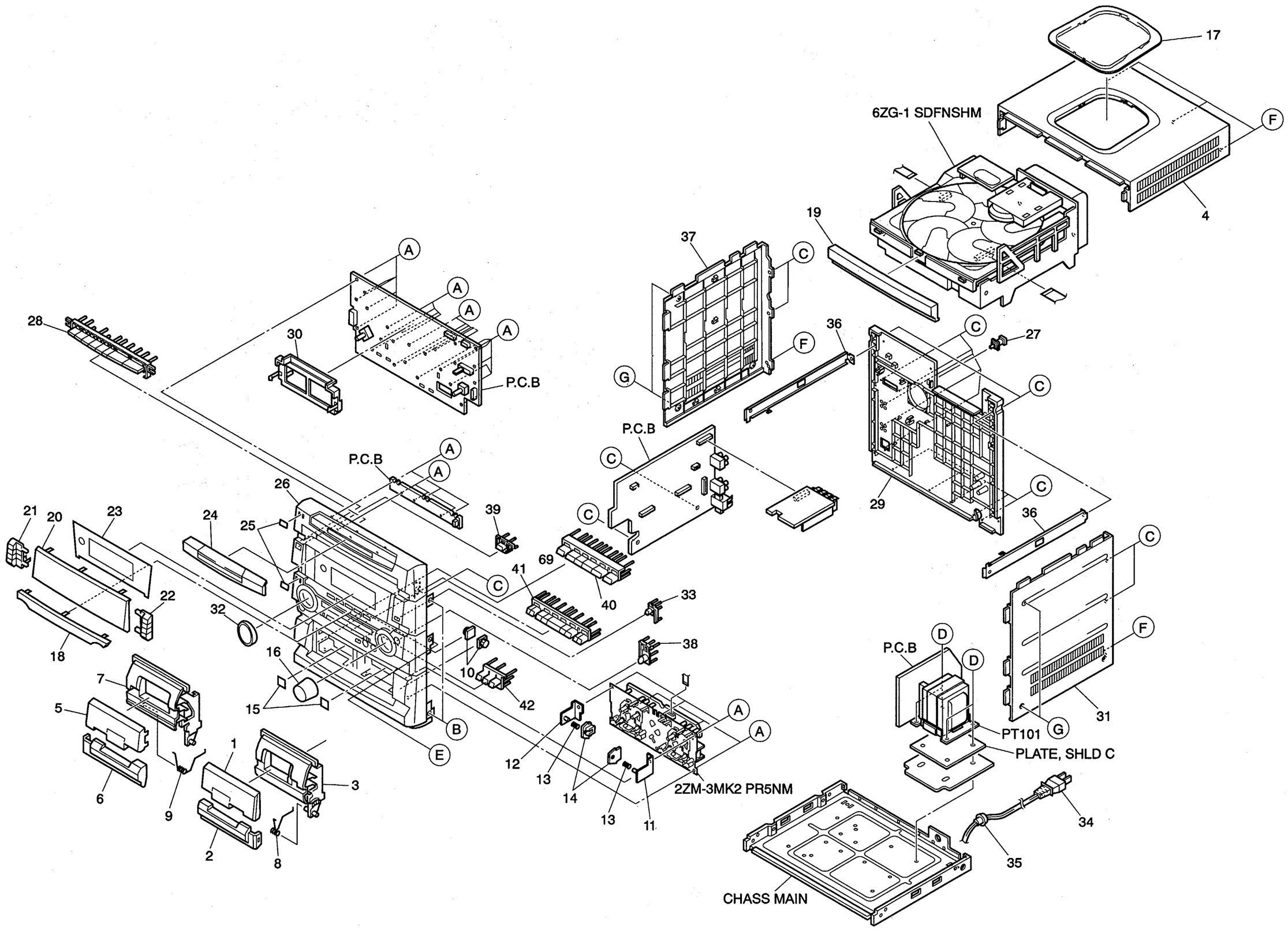
If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8Z-MA1-016-010		WINDOW,CASS R
2	8Z-MA1-007-010		BOX,CASS R
3	8Z-MA3-025-010		PANEL,CASS(A3) R
4	8Z-MA4-057-010		PANEL,TOP
5	8Z-MA1-015-010		WINDOW,CASS L
6	8Z-MA1-006-010		BOX,CASS L
7	8Z-MA3-024-010		PANEL,CASS(A3) L
8	82-NF5-219-010		SPR-T,EJECT 2 (SIN)
9	82-NF5-218-010		SPR-T,EJECT 1 (SIN)
10	87-NF8-220-010		DMPR,150
11	87-NF4-217-110		HLDR,LOCK 2
12	87-NF4-216-010		HLDR,LOCK 1
13	86-NF9-224-010		SPR-C,LOCK
14	82-NF5-229-010		PLATE,LOCK
15	81-532-080-010		LABEL, CASS. COMPT
16	8Z-MA1-039-010		KNOB,RTRY MAIN
17	86-MA3-042-010		WINDOW,TOP
18	8Z-MAD-022-010		PANEL,FUN(13)
19	8Z-MA1-010-010		PANEL,TRAY
20	8Z-MAD-021-010		WINDOW,AMP (13) EZ1
21	8Z-MAD-010-010		KEY,GEQ (13)
22	8Z-MAC-009-010		PANEL,DSP (12)
23	8Z-MAD-018-010		PLATE,DISPLAY (13)
24	8Z-MAC-034-010		PANEL,CD (12)
25	82-NE6-067-010		BADGE,AIWA 30N
26	8Z-MAD-005-010		CABI,FR(13) EZ1
27	84-ZG1-245-210		CAP,OPTICAL
28	8Z-MAC-037-010		KEY,DIRECT (12)
29	8Z-MAD-006-010		CABI,REAR EZ(13)
30	82-NF7-210-110		GUIDE,FL (*)
31	8Z-MA5-020-010		PANEL,SIDE R(5)
32	8Z-MAD-015-010		PANEL,JOG (13)
33	8Z-MA1-044-010		KEY,DEMO
⚠ 34	87-050-079-010		AC-CORD ASSY,E
35	88-NF9-210-010		BUSHING,CORD-E
36	88-MA1-208-110		JOINT,CABI
37	8Z-MA5-019-010		PANEL,SIDE L(5)
38	8Z-MA1-040-010		KEY,T-BASS
39	8Z-MAD-014-010		KEY,POWER (13)
40	8Z-MAD-012-010		KEY,FUN (13)
41	8Z-MAD-017-010		KEY,PLAY (13) REV
42	8Z-MAD-016-010		KEY,RDS (13)
A	87-078-060-010		BVIT3PB+3-10
B	87-721-096-410		QT2+3-10 GLD
C	87-067-703-010		TAPPING SCREW, BVT2+3-10
D	87-741-172-410		UT2+4-12 W/O SLOT
E	87-591-095-410		TAPPING SCREW, QIT+3-8 (GLD)
F	87-067-758-010		BVT2+3-12 W/O SLOT
G	87-067-641-010		UTT2+3-8(W/O SLOT)BL

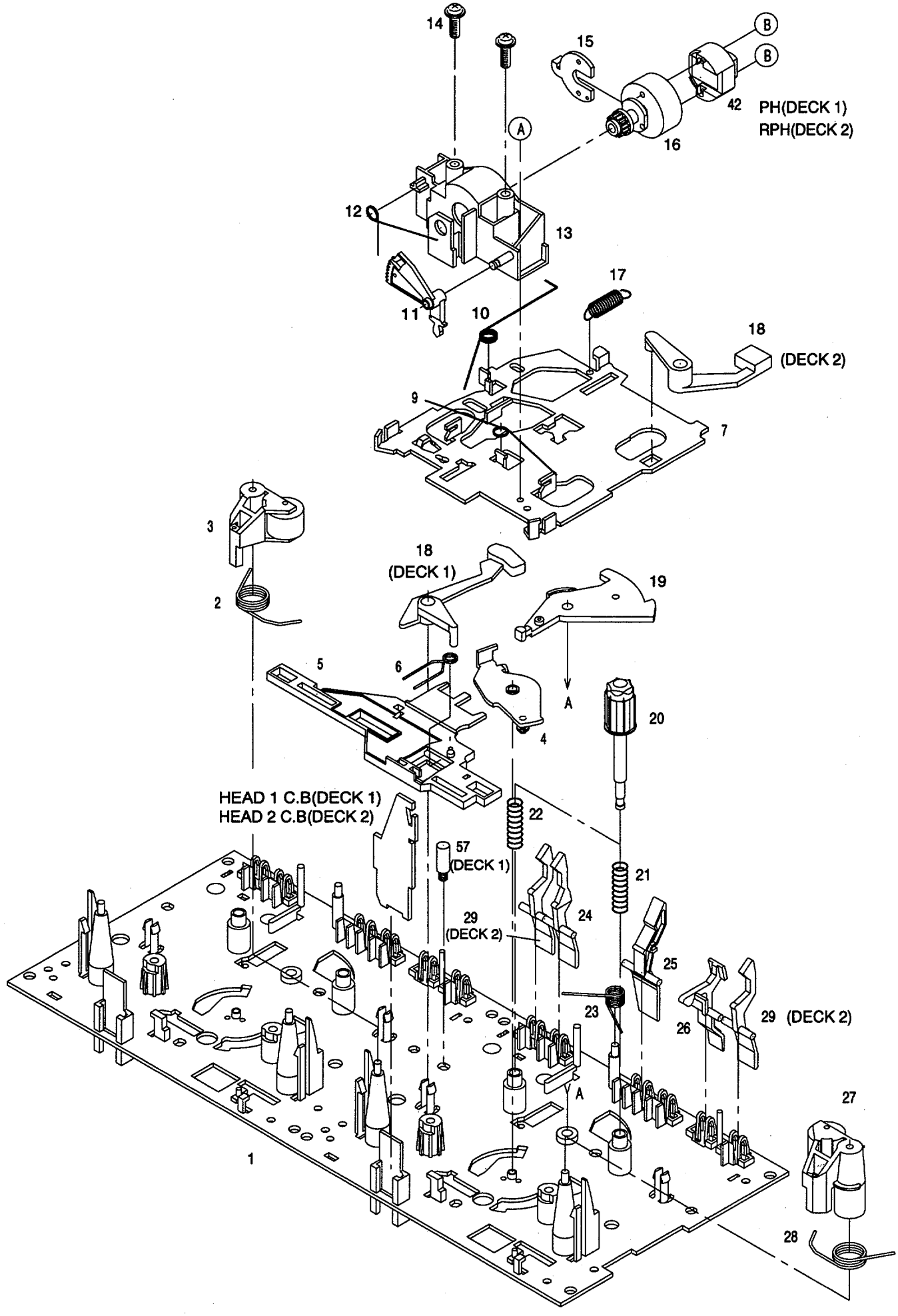
COLOR NAME TABLE

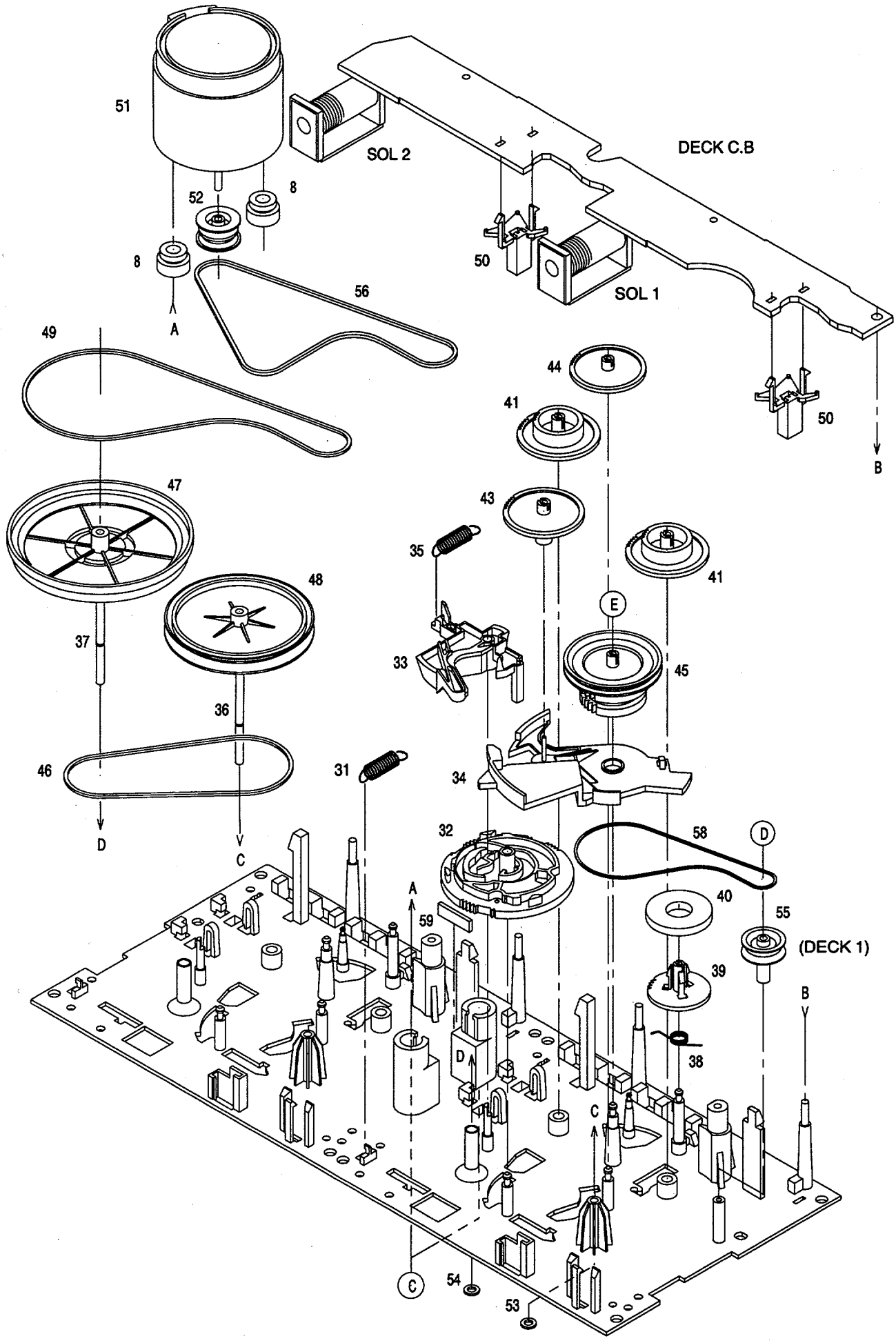
Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange		

MECHANICAL EXPLODED VIEW 1 / 1



TAPE MECHANISM EXPLODED VIEW 1 / 1




51
SOL 2
DECK C.B
52
8
8
50
SOL 1
56
A
49
44
41
50
B
47
43
35
41
48
E
33
45
37
36
46
31
34
D
C
32
58
D
A
40
55
59
(DECK 1)
39
B
38
D
C
C
54
53

TAPE MECHANISM PARTS LIST 1 / 1

If can't understand for Description please kindly refer to " REFERENCE NAME LIST ".

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	82-ZM3-301-519		CHAS ASSY,M2
2	82-ZM1-258-110		SPR-T,PINCH L
3	82-ZM1-341-110		LVR ASSY,PINCH L2
4	82-ZM1-333-010		PLATE,LINK 2
5	82-ZM1-266-11K		LVR,DIR
6	82-ZM1-214-010		SPR-T,DIR
7	82-ZM1-206-81K		CHAS,HEAD
8	82-ZM3-307-019		CUSH-G,DIA3.7-8-3.2
9	82-ZM1-269-219		SPR-T,BRG
10	82-ZM1-219-119		SPR-T,LINK
11	82-ZM1-210-119		GEAR,H T
12	82-ZM1-213-019		SPR-T,HEAD
13	82-ZM1-207-619		GUIDE,TAPE
14	86-ZM4-206-010		S-SCREW,AZIMUTH
15	82-ZM1-314-119		PLATE,HEAD
16	82-ZM1-208-119		HLDR,HEAD
17	82-ZM1-218-019		SPR-E,HB
18	82-ZM1-263-110		LVR,EJECT L (DECK 1)
18	82-ZM1-264-010		LVR,EJECT R (DECK 2)
19	82-ZM1-222-21K		LVR,PLAY
20	82-ZM1-217-319		REEL TABLE
21	82-ZM1-244-510		SPR-C,BT
22	82-ZM1-285-310		SPR-C,BT L
23	82-ZM1-257-019		SPR-T,CAS
24	82-ZM1-241-319		LVR,MC
25	82-ZM1-242-019		LVR,CAS
26	82-ZM1-243-019		LVR,STOP
27	82-ZM1-344-110		LVR ASSY,PINCH R2
28	82-ZM1-259-110		SPR-T,PINCH R
29	82-ZM1-240-11K		LVR,REC (DECK 2)
31	82-ZM1-255-319		SPR-E,LVR DIR
32	82-ZM3-305-01K		GEAR,CAM M2
33	82-ZM1-227-21K		LVR,TRIG
34	82-ZM3-306-11K		LVR,FR M2
35	82-ZM1-265-119		SPR-E,TRIG
36	82-ZM1-236-019		CAPSTAN N 2-41.5
37	82-ZM1-239-019		CAPSTAN N 2.2-41.7
38	82-ZM1-322-019		SPR-T,FR60
39	82-ZM1-220-219		GEAR,IDLER
40	82-ZM3-616-019		RING MAGNET 4
41	82-ZM1-216-31K		GEAR,REEL
42	87-A90-366-010		HEAD,PH YK50P-BF414 FPC
42	87-A90-367-010		HEAD,RPH YK56R-BF414 FPC
43	82-ZM1-225-21K		GEAR,FR
44	82-ZM1-226-019		GEAR,REW
45	82-ZM3-333-310		SLIP DISK ASSY 2
46	82-ZM1-338-010		BELT FR4
47	82-ZM1-349-110		FLY-WHL,R W(DECK 2)
47	82-ZM3-338-110		FLY-WHL,R3 W(DECK 1)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 2)
48	82-ZM1-348-010		FLY-WHL,L W(DECK 1)
49	82-ZM3-329-210		BELT,SBU R2
50	82-ZM1-245-210		HLDR,IC
51	87-045-347-019		MOT,SHU2L 70(M1)
52	82-ZM3-221-010		PULLEY,MOT 2M
53	82-ZM1-288-019		SH,1.63-3.2-0.5 SLT
54	80-ZM6-243-019		SH,1.75-3.6-0.5 SLT
55	82-ZM3-335-210		PULLEY,COUPLER M3(DECK 1)
56	82-ZM3-337-010		BELT,SBU MOT 2
57	82-ZM3-339-010		SHAFT,COUPLER N3(DECK 1)
58	86-ZM1-206-010		BELT,MAIN L
59	82-ZM3-340-010		SH,BELT D2
A	85-ZM3-202-010		S-SCREW,TG
B	80-ZM6-207-019		V+1.6-7
C	82-ZM3-318-019		S-SCRW MOTOR M2
D	87-B10-043-010		W-P,0.99-4-0.25 SLT
E	82-ZM3-334-010		PW,2.16-6-0.4

REFERENCE NAME LIST

ELECTRICAL SECTION

DESCRIPTION	REFERENCE NAME
ANT	ANTENNAS
C-	CHIP
C-CAP	CAP, CHIP
C-CAP TN	CAP, CHIP TANTALUM
C-COIL	COIL, CHIP
C-DI	DIODE, CHIP
C-DIODE	DIODE, CHIP
C-FET	FET, CHIP
C-FOTR	FILTER, CHIP
C-JACK	JACK, CHIP
C-LED	LED, CHIP
C-RES	RES, CHIP
C-SFR	SFR, CHIP
C-SLIDE SW	SLIDE SWITCH, CHIP
C-SW	SWITCH, CHIP
C-TR	TRANSISTOR, CHIP
C-VR	VOLUME, CHIP
C-ZENER	ZENER, CHIP
CAP, CER	CAP, CERA-SOL
CAP, E	CAP, ELECT
CAP, M/F	CAP, FILM
CAP, TC	CAP, CERA-SOL
CAP, TC-U	CAP, CERA-SOL SS
CAP, TN	CAP, TANTALUM
CERA FIL	FILTER, CERAMIC
CF	FILTER, CERAMIC
DL	DELAY LINE
E/CAP	CAP, ELECT
FILT	FILTER
FLTR	FILTER
FUSE RES	RES, FUSE
MOT	MOTOR
P-DIODE	PHOTO DIODE
P-SNSR	PHOTO SENSER
P-TR	PHOTO TRANSISTOR
POLY VARI	VARIABLE CAPACITOR
PPCAP	CAP, PP
PT	POWER TRANSFORMER
PTR, RES	PTR, MELF
RC	REMOTE CONTROLLER
RES NF	RES, NON-FLAMMABLE
RESO	RESONATOR
SHLD	SHIELD
SOL	SOLENOID
SPKR	SPEAKER
SW, LVR	SWITCH, LEVER
SW, RTRY	SWITCH, ROTARY
SW, SL	SWITCH, SLIDE
TC CAP	CAP, CERA-SOL
THMS	THERMISTOR
TR	TRANSISTOR
TRIMER	CAP, TRIMMER
TUN-CAP	VARIABLE CAPACITOR
VIB, CER	RESONATOR, CERAMIC
VIB, XTAL	RESONATOR, CRYSTAL
VR	VOLUME
ZENER	DIODE, ZENER

MECHANICAL SECTION

DESCRIPTION	REFERENCE NAME
ADHESHIVE	SHEET ADHESHIVE
AZ	AZIMUTH
BAR-ANT	BAR-ANTENNA
BAT	BATTERY
BATT	BATTERY
BRG	BEARING
BTN	BUTTON
CAB	CABINET
CASS	CASSETTE
CHAS	CHASSIS
CLR	COLLAR
CONT	CONTROL
CRSR	CURSOR
CU	CUSHION
CUSH	CUSHION
DIR	DIRECTION
DUBB	DUBBING
FL	FRONT LOADING
FLY-WHL	FLYWHEEL
FR	FRONT
FUN	FUNCTION
G-CU	G-CUSHION
HDL	HANDOL
HIMERON	CLOTH
HINGE, BAT	HINGE, BATTERY
HLDR	HOLDER
HT-SINK	HEAT SINK
IB	INSTRUCTION BOOKLET
IDLE	IDLER
IND, L-R	INDICATOR, L-R
KEY, CONT	KEY, CONTROL
KEY, PRGM	KEY, PROGRAM
KNOB, SL	KNOB, SLIDE
LBL	LABEL
LID, BATT	LID, BATTERY
LID, CASS	LID, CASSETTE
LVR	LEVER
P-SP	P-SPRING
PANEL, CONT	PANEL, CONTROL
PANEL, FR	PANEL, FRONT
PRGM	PROGRAM
PULLY, LOAD MO	PULLY, LOAD MOTOR
RBN	RIBBON
S-	SPECIAL
SEG	SEGMENT
SH	SHEET
SHLD-SH	SHIELD-SHEET
SL	SLIDE
SP	SPRING
SP-SCREW	SPECIAL-SCREW
SPACER, BAT	SPACER, BATTERY
SPR	SPRING
SPR-P	P-SPRING
SPR-PC-PUSH	P-SPRING, C-PUSH
T-SP	T-SPRING
TERM	TERMINAL
TRIG	TRIGGER
TUN	TUNING
VOL	VOLUME
W	WASHER
WHL	WHEEL
WORM-WHL	WORM-WHEEL

サービス技術ニュース	
番号	連絡内容
G— —	
G— —	
G— —	

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